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Custom Rates for Farm Machinery

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CUSTOM RATES FOR FARM MACHINERY

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IOWA FARMERS are hiring more custom work done on their farms than they used to. And it's a logical adjustment. Farmers can't always afford to invest in a complete line of machinery just for their own needs. The size of their operation may not justify it.

For special jobs—combining, hay baling, cornpicking and the like—it's often cheaper to hire the work done. This way the small operator avoids the risk and investment of owning high-cost machinery.

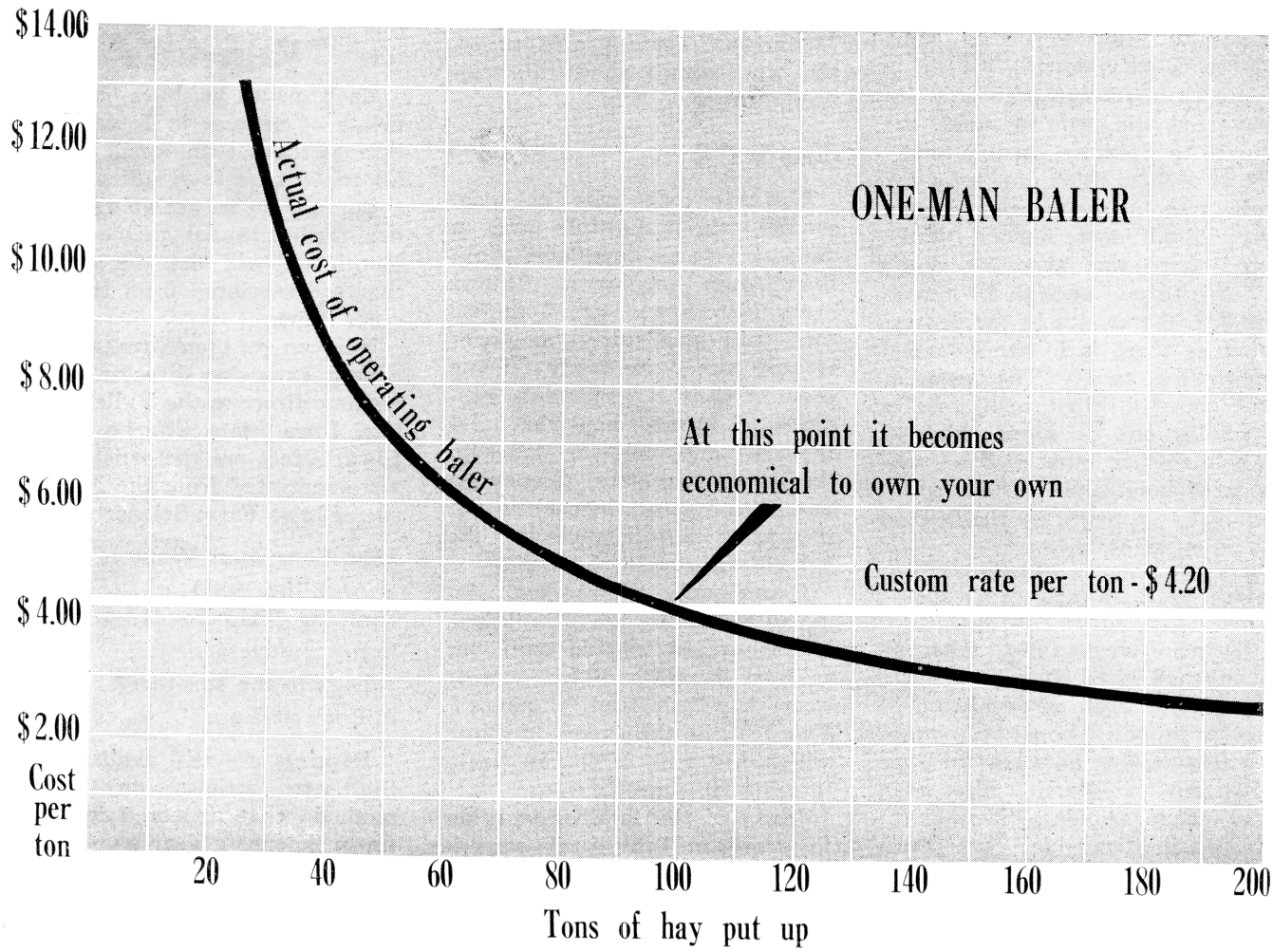
There's nothing new in this. Farmers have been sharing work, owning equipment jointly, since machinery was invented. Custom work is just a different method of solving the same old problem—making fewer machines serve more farmers.

Individual farmers may be concerned in two ways. They can put off buying machinery now, depend on hiring the work done for special jobs. Or they can go ahead and buy; then hire out on a custom basis themselves.

In either case there will be some head-scratching over a fair charge for the work. We did a little of this ourselves. Then we studied machinery cost figures from a large number of Iowa farms. The averages we got won't tell us what the rates for custom work should be on your farm or in your community. Too many special circumstances enter in. But let's look at some of the costs involved.

The accompanying table lists some of the standard charges that should be considered in setting a reasonable rate for custom work. These are average figures for the state, and will serve only as a general base. Use them as models for adjusting rates in your community.

As you make greater use of your machines, the cost per unit goes down. In this case it becomes economical to own your own hay baler when you have about 100 tons or more of hay to put up. The difference between custom rates and baling-your-own doesn't widen very fast beyond this point, however.



All these figures are useful only as models or yardsticks in setting custom rates for particular machines. Actual rates will vary by conditions and localities. By checking with these figures, however, you can tell whether actual rates are in line with the state averages. Prospective operators may find them helpful in setting rates to cover operating costs.

Part of the price you pay for machinery is a fixed cost on your farm. No matter how little or how much you use your machinery, it loses value steadily. Besides the wear and tear that comes from use, there's obsolescence. That's the loss you take when machines come on the market that are better than yours.

New harvest machinery replaces the old; weed sprays may shortly outmode our row-crop cultivators; even our tillage practices have changed.

The custom operator, who wears his machinery out in a few years of intensive use, can get the full use out of the machinery before it becomes obsolete. This is not always true of machinery-on-the-farm. Many farmers have had to discard machinery that was still operating in favor of up-to-date equipment. Others continue to use equipment that is not very efficient.

There's the interest charge too. Money invested in machinery costs you the interest it could earn somewhere else. Or, if you

CUSTOM RATES FOR FARM MACHINERY

Machine	Man, tractor and machine hours per acre 1	RATES PER HOUR		Percent added for risk and management 4	RATES PER ACRE				
		Labor rate* per hour 2	Tractor rate† per hour 3		Machine cost per acre 5	Labor cost per acre 6	Tractor cost per acre 7	Mgmt. and risk charge per acre 8	Total cost per acre 9
Combine, 5 ft.	.83	1.00	.75	50	.94	.83	.62	1.20	3.59
Corn picker, 2-row	.81	1.00	.75	50	.96	.81	.61	1.19	3.57
Corn planter, 2-row	.40	.75	.67	20	.19	.30	.27	.38	1.14
Cultivator, 2-row	.51	.75	.67	20	.10	.38	.34	.16	.98
Disk, single 10 ft.	.32	.75	.75	20	.07	.24	.24	.11	.66
Disk, double 8 ft.	.42	.75	.75	20	.09	.32	.32	.15	.88
Ensilage cutter, stationary	1.67	.75	.75	50	.31	1.25	1.25	.46	3.27
Grain binder 8 ft.	.47	.90	.75	20	.53	.42	.35	.26	1.56
Grain drill, 12 ft.	.30	.75	.75	20	.25	.23	.23	.14	.85
Mower, 7 ft.	.42	.75	.67	20	.25	.32	.32	.18	1.07
Plow, 2-bottom	1.16	.75	.75	20	.29	.87	.87	.40	2.43
Rake, dump	.30	.75	.67	20	.19	.23	.20	.12	.74
Rake, side delivery	.33	.75	.67	20	.21	.25	.22	.13	.81
Spike, harrow 18 ft.	.15	.75	.67	20	.03	.11	.10	.05	.29
Spring-tooth harrow	.38	.75	.67	20	.07	.29	.25	.12	.73
Baling, 1-man baler									3.20‡

* Varies with season and skill required for operation.
† Varies with load.
‡ Per ton harvested. Most of the balers on which this figure is based were harvesting a large acreage of hay.

COLUMN 1 shows the average number of machine, tractor and man hours that it takes for some common machines to cover an acre. This average serves as a good base; but it should be adjusted to local conditions. Weather, size of machine, size of fields, hilliness, weeds, ditches—all such factors will cause the number of hours to vary from farm to farm.

Here's a quick way to figure how many acres a machine will cover in a 10-hour day. Just multiply the width of your machine (in feet) times your rate of travel (in miles per hour). This allows for a 17½ percent time loss. To get acres per hour divide by 10, or set over one decimal point.

COLUMN 2 lists the wages per hour used in estimating custom rates. Wages are likely to vary by locality, season of the year and the skill needed to operate a particular machine. Cornpicking, combining, hay baling or chopping takes an operator that is fairly experienced.

COLUMN 3 shows an hourly charge for tractor use. At today's price level, the cost of depreciation, interest, taxes, housing, fuel and oil averages about 75 cents per hour for average tractor operations. The cost is less for light loads; and it may vary for localities, conditions and size of tractor.

COLUMN 4 is the additional percentage charge added as an adjustment for ownership responsibility, supervision, time and expense in moving from job to job, and for a "risk" charge. This is the item which must include some "profit" for the responsibilities of ownership. For some machines, especially those that do only a small amount of custom work, only 20 percent of the cost has been added to meet these extra charges. For such machines as combines and balers, this charge may amount to as much as 50 percent.

COLUMN 5 gives the average machine cost per acre. These figures are average costs gathered in studies of a large number of Iowa farms. Actual machine costs per acre will vary from farm to farm, according to size of farm and other conditions.

In addition to regular repair and maintenance, figures include interest, depreciation, insurance, taxes and a housing charge. We use the average figure because this is the starting point from which custom rates must be set competitively. The actual cost of all machines tends to vary with use—as shown by the chart for a one-man baler.

COLUMN 6 contains a labor cost per acre; it is figured from columns 1 and 2.

For example, corn planting takes about .40 hours per acre. We multiply this figure (.40) times the labor cost per hour ($.75) and get a labor cost per acre of 30 cents.

COLUMN 7 gives the power cost per acre. We get it by multiplying column 1 times column 3.

COLUMN 8 lists the risk-management charge. And this is found by multiplying the rate in column 4 by the total of columns 5, 6 and 7.

For another example: the total of the machinery, power and labor costs for a combine is $2.39 (94 cents plus 83 cents plus 62 cents). The risk-management premium added is $1.20 —or about one-half the $2.39 figure.

COLUMN 9 carries the total charge per acre. It is the over-all cost for the machine, labor, power and risk-management; the sum of columns 5, 6, 7 and 8.

buy on credit, the interest charge is more obvious. Many farmers will be better off to invest in short-run stock that is productive rather than in expensive, specialized machinery. Your investment in machinery is a long-time investment; you realize its full use value over several years.

Beginning farmers especially, along with all farmers who lack operating capital, stand to gain more by investing where returns will come quickly. This keeps the farm business flexible. As long as prices are favorable, the premium is on production. Production is what pays, even if short run costs (not fixed investments) go up some too.

If farm prices decline in the next few years, a machinery investment made now would be high in proportion to income. If prices remain the same or go higher, your work may cost you a little more at custom rates; but the difference won't keep you from making a good income.

Machines Are Needed

Obviously, this doesn't mean that farmers should not invest in modern machinery. Far from it. New specialized equipment is becoming more important to farmers. It means greater efficiency —higher production, lower costs. And don't overlook the advantages that come from having work done at the right time.

We believe the complexity and high cost of farm machinery will encourage custom work. For the average farmer it can mean less money tied up in equipment, more operating capital to run his farm business. Right now it is especially important. There just isn't enough machinery to go around.

Added to the figures in column 9 will be some extra profit for operation. A "scarcity premium" may be part of this. Until farm machinery becomes more plentiful, many farmers may have to pay higher rates for custom work —just to meet competition. This extra profit plays an important part in bringing more machines into custom operation. The extra "profit" may turn into a "loss" when too many machines enter the custom field.

Geneva Trade Agreements

A LONG forward step toward international peace and prosperity was taken on October 30, 1947. On that date the United States joined with 22 other countries of the world at Geneva in a general agreement on tariffs and trade.

This is the broadest international agreement ever made for reducing world trade barriers. In prewar days these 23 countries conducted about three-fourths of all world trade. Tariff concessions apply to products which account for about two-thirds of all import trade of the 23 countries.

General provisions of the Geneva Trade Agreement are much the same as those of our reciprocal trade agreements. The main difference is that this is an agreement between several countries instead of just two.

Concessions We Got

Concessions made by other countries at Geneva cover almost all of the important products produced by Iowa for export. Some of the principal Iowa products for which concessions were obtained in other countries are: dairy products, meat and meat products, wheat, flour and grain mill products, other grains and grain products, canned vegetables, agricultural machinery and certain chemical products.

Here are the specific concessions made by other countries on meat and meat products: The United Kingdom granted more favorable treatment on ham and hog sausage casings; she bound (agreed to leave) lard on the free list. France reduced her tariff on lard. Australia placed sausage casings on the free list, eliminating the preference. Czechoslovakia reduced the duty on sausage casings. Norway lowered its tariff on intestines. Newfoundland bound existing rates on dry, salted or pickled hams or tongues and bound free of duty salted beef and pork and meats. Cuba reduced its duties on fat salted pork, certain lard and canned luncheon meats and bound the duties on hogs and salt pork. New Zealand reduced the duty on sausage casings. South Africa reduced the duties on lard and eatable meat fats.

Wheat is another important American export farm crop. In this area the United Kingdom bound wheat duty free. France reduced duty by 66 percent. China bound the present 15 percent rate. Cuba reduced the duty by 50 percent.

Concessions We Made

The United States in return gave concessions too. Some of the principal Iowa products on which reductions were made by the United States were: butter, condensed and evaporated milk, dried milk and cream, dried skimmilk and buttermilk and live cattle (other than for breeding).

Iowa farmers are mainly interested in butter and live cattle. The tariff rate on butter was reduced from 14 cents to 7 cents per pound on a quantity not to exceed 50 million pounds imported from November through March when production of this country is lowest. If more than 50 million pounds are imported during those months and any butter entering the United States during the rest of the year will be subject to the present tariff rate of 14 cents—which is bound. Normally we export about as much butter as we import over a year's time.

The prevailing tariff rate of 1½ cents per pound on live calves and on cattle weighing 700 pounds or more each is bound. The quota on calves was boosted from 100,000 head to 200,000 head per year and the quota on cattle weighing 700 pounds or more was boosted from 225,000 head to 400,000 head per year. Tariff on cattle in excess of the quotas was bound at 2½ cents per pound.

Prewar imports of dutiable cattle averaged 558,000 head per year. In 1946 imports were 516,000 head. In 1943 all quotas were suspended during the emergency. They will continue so until the President has declared an end to the meat emergency.